



Department of Toxic Substances Control



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TOURTELOT CLEANUP PROJECT ORDNANCE AND EXPLOSIVES REMEDIATION MINIMUM SEPARATION DISTANCE

Dear Mr. Handel and Mr. Splitter:

The purpose of this letter is to respond to your request to implement the United States Army Corps of Engineer (ACE) recommended Minimum Separation Distance (MSD) of 200 feet during ordnance and explosives (OE) remediation for the Tourtelot Cleanup Project. It is the Department of Toxic Substances Control's (DTSC) understanding that Granite and ACE intend to use the ACE recommended 200 foot MSD to establish an area in which all nonessential personnel will be withdrawn for their protection in the event of an accidental detonation during the OE remedial activities. Although some risk remains to the surrounding people and property, it is DTSC's understanding that Granite and the ACE are willing to appropriately address any injury or damage caused by a detonation at the site.

DTSC initially requested the use of the maximum fragmentation distance of the most probable munition as the MSD for the site. The current maximum fragmentation distance is estimated at 1,080 or 1,181 feet based on the most probable munitions to be found across the site. Granite and ACE have requested the MSD be based on the calculated distance that represents the location at which fragments in flight from an accidental detonation of the most probable munition will equal 1 hazardous fragment in a 600 square foot area (1/600). This is approximately a 1% chance for a person six feet tall and approximately one foot wide, standing in the open at the 1/600 MSD distance to be hit by a hazardous fragment in the event of an accidental detonation.

ACE has advised us that there have been no reported accidents involving clearance operations while employing the 1/600 MSD. The use of the 1/600 is not normally used for OE projects unless certain site and ordnance conditions are met. Additionally, ACE

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web-site at www.dtsc.ca.gov.